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(58) Field of search

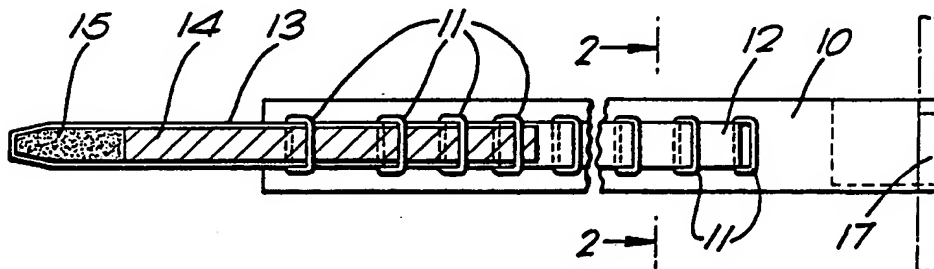
UK CL (Edition J) A4X X1 X6

INT CL<sup>4</sup> A45C, A61F

(54) Elongate strap-like device

(57) An elongate strap-like device comprises a length of material 10 which has on one side thereof a row or rows of transversely extending spaced-apart loop members 11, a longitudinally extending strap portion 13 extending from one end of the length of material 10 in line with the or each row of loop members 11 and which can be passed through any one of the loop members 11 of the or the associated row, and self-fastening material 14, 15 being provided for fastening the free end portion of the strap portion 13 to the length of material 10 after it has been passed through and folded around a loop member 11.

FIG. 1



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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.

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FIG. 1

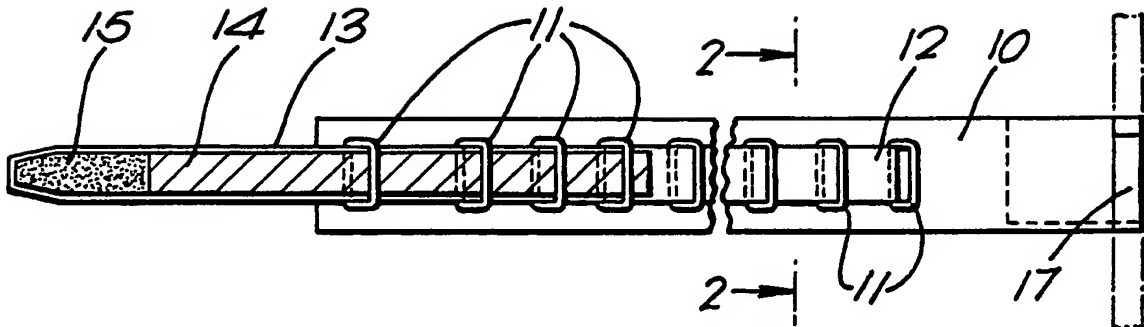


FIG. 2

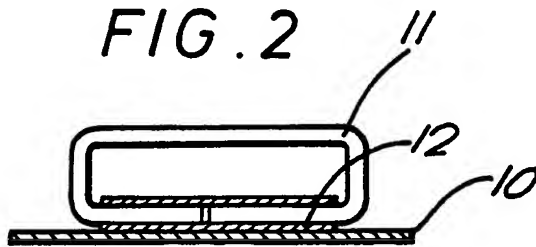


FIG. 5

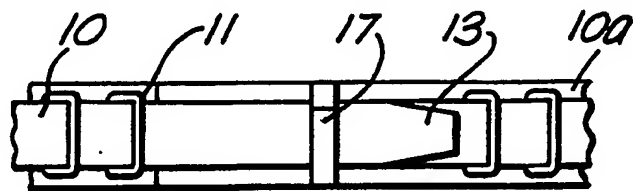


FIG. 6

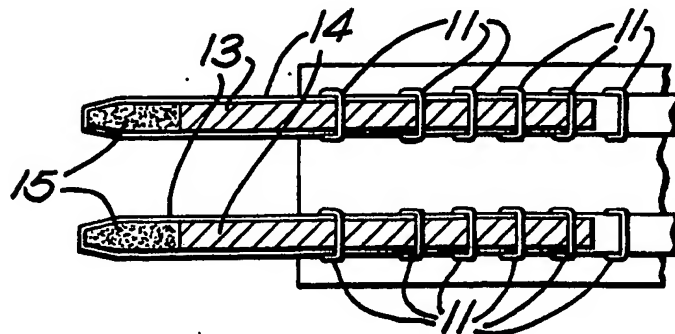


FIG. 3

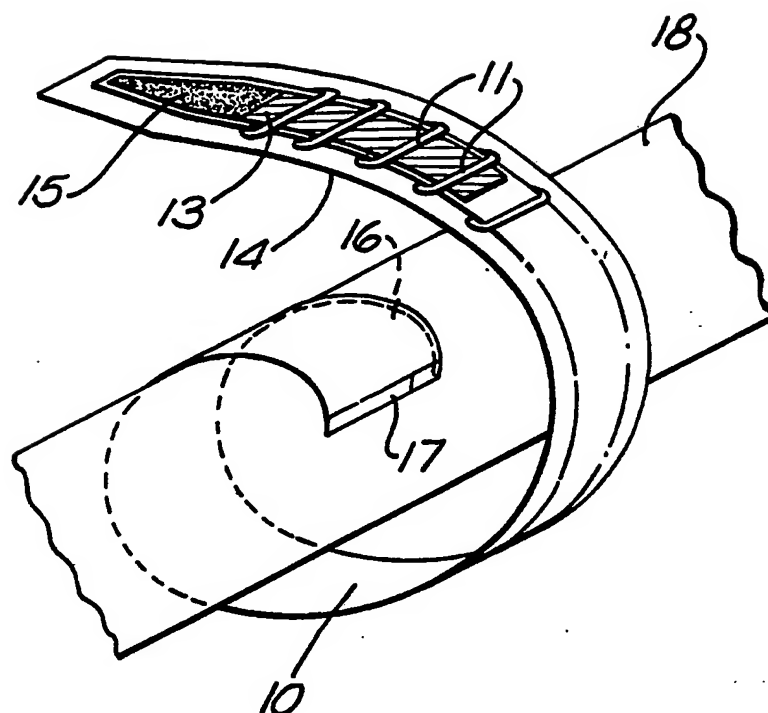
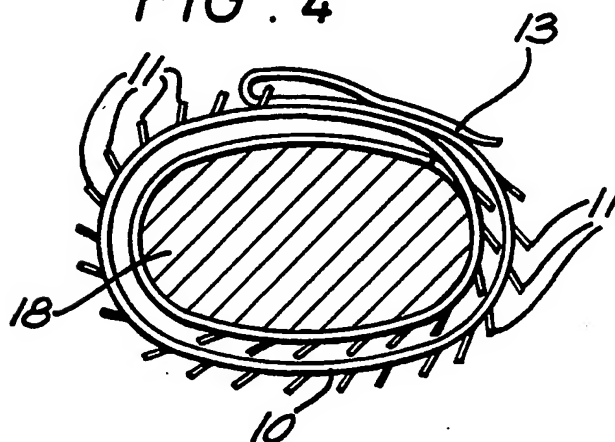


FIG. 4



ELONGATE STRAP-LIKE DEVICE

This invention relates to an elongate strap-like device and particularly, but not exclusively, to a strap-like device which can be wrapped around a part of a human or animal body to fasten it to a splint or other body part or to apply pressure to a part of the body.

5 It is known to wrap an elongate strap-like device around a part of a body, such as around a limb, to fasten it to a splint or other body part or to apply pressure to said part of the body. The known devices merely comprise a length of material having at one end means for securing the end to the body portion of the device. Such known devices are usually produced in  
10 different lengths and a device of the desired length is chosen according to the size of the body portion which it is to be wrapped around. This is inconvenient for the person who is applying the device as that person must be able to judge what length device should be used and this is difficult if the device is to be applied in the dark. It is also necessary to have to hand a  
15 selection of devices of different lengths. The pressure which can be applied by the known device, when wrapping it around a part of a body, is limited by the tension that the person applying the device can produce in the device during the wrapping procedure and no means are provided for increasing the pressure after wrapping.

20 According to the present invention there is provided an elongate strap-like device, comprising a length of material having on one side thereof at least one longitudinally extending row of transversely extending spaced-apart loop members secured thereto, a longitudinally extending strap portion extending from one end of the length of material in line with the or  
25 each row of loop members and which can be passed through any one of the loop members of the or the associated row, and means for fastening the free end portion of the strap portion to the length of material after it has been passed through and folded around a loop member.

30 Preferably said fastening means comprise strips of self-fastening material, e.g. of the type sold under the registered trade mark "Velcro", provided on the strap portion and on the length of material.

Preferably the end portion of the length of material remote from the strap portion is provided with a pocket.

The length of material may be provided with two parallel longitudinally extending rows of loop means and two strap portions extending from said one end of the length of material.

Two or more such devices may be joined end-to-end by passing the strap portion or strap portions of one member around a loop or loops of an adjacent member and then fastening the strap portion or strap portions to said one member.

Two embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is a plan view of a first embodiment of an elongate strap-like device according to the present invention,

Figure 2 is a transverse section on a larger scale taken along the line 2-2 of Figure 1,

Figure 3 shows diagrammatically the elongate strap-like device being wrapped around a limb,

Figure 4 shows a cross-section through the strap-like device wrapped around a limb,

Figure 5 shows in plan view the adjacent ends of two elongate strap-like devices joined together in end-to-end relationship, and

Figure 6 is a plan view of one end of a second embodiment of an elongate strap-like device according to the present invention.

The elongate strap-like device shown in Figures 1 to 5 comprises a length of material 10, which is preferably formed of a woven plastics material such as a polyester or a polyamide, e.g. that sold under the registered Trade Mark "Nylon". Provided on one side of the length of material 10 is a longitudinally extending row of transversely extending spaced-apart loop members 11 which may be formed of metal or plastics material. The loop members 11 are secured to the length of material 10 by a strip of material 12 which is stitched or welded to the length of material 10. Extending from one end of the length of material 10 is a strap portion 13 which is in line with the row of loop members 11 and of a width such that it can be passed through any one of the loop members 11. Part of the length of the strip of material 12 is covered by a strip of material 14 and part of the strap portion 13 is covered by a strip of material 15. The materials 14

and 15 are self-fastening material e.g. of the type sold under the registered Trade Mark "Velcro".

The end of the length of material 10 remote from the strap portion 13 is provided with a pocket 16 in which can be placed a dressing or dressings or any soft bulk material to form a pad. This end of the length of material 10 is also provided with two transverse strips 17 which can be folded one on top of the other and secured together by a self-fastener such as strips of "Velcro" material.

In use of the device the end of the length of material 10 provided with the pocket 16, which may be empty, is placed on say a limb 18 with the side provided with the loop member 11 outermost and is wrapped around the limb 18. After the length of material 10 has been wrapped around the limbs 18 the free end of the strap portion 13 is passed through and folded around one of the loop members 11 and pulled until the strip of material 15 can be placed over and engaged with the strip of material 14. By choosing an appropriate loop member 11 the tension applied to the strap portion 13 thus produces desired pressure on the limb 18. This pressure can be applied via a pad when such is placed in the pocket 16. The elongate strap-like device is thus firmly held in position. By providing the row of loop members 11 the device can be applied to the limbs 18 of different sizes.

Figure 5 illustrates two devices 10 and 10a secured together in end-to-end relationship. The strap portion 13 of the device 10a is passed through and folded around a loop member 11 of the device 10 and the strip of material 15 is placed over and engaged with the strip of material 14 on the device 10a, and the two transverse strips 17 on the device 10 are folded over the device 10a and secured together.

Figure 6 illustrates an elongate strap-like device in which the length of material is provided with two parallel longitudinally extending rows of loop members 11 and two strap portions 13 extending from one end of the length of material 10. The width of the length of material 10 is preferably twice the width of the length of material 10 provided with only one row of loop members 11.

The elongate strap-like device embodying the invention is intended mainly for use in fastening a limb to another limb or to a splint, or to apply pressure to a limb to close a wound. However, the device can be used for other purposes.

The elongate strap-like device can be folded or rolled up so that it occupies only a small volume for storage.

CLAIMS

1. An elongate strap-like device, comprising a length of material having on one side thereof at least one longitudinally extending row of transversely extending spaced-apart loop members secured thereto, a longitudinally extending strap portion extending from one end of the length of material in line with the or each row of loop members and which can be passed through any one of the loop members of the or the associated row, and means for fastening the free end portion of the strap portion to the length of material after it has been passed through and folded around a loop member.
2. An elongate strap-like device as claimed in claim 1, in which said means for fastening the free end of the strap portion to the length of material comprises a strip of self-fastening material provided on the strap portion and a strip of self-fastening material provided on the length of material or on the strap portion.
3. An elongate strap-like device as claimed in claim 1 or claim 2, in which the loop members are secured to the length of material by a strip of material secured to the length of material.
4. An elongate strap-like device as claimed in any preceding claim, in which the length of elongate material is provided with a pad.
5. An elongate strap-like device as claimed in claim 4, in which the pad is housed in a pocket.
6. An elongate strap-like device as claimed in any preceding claim, in which two parallel rows of transversely extending spaced-apart loop members and two strap portions are provided.
7. An elongate strap-like device as claimed in any preceding claim, in which each loop member is formed of metal or plastics material.
8. An elongate strap-like device substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.



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